Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
Total Participant Costs (F)	\$0
G. Other Direct Costs	
Materials Supplies	\$366
Publication Costs	\$0
Consultant Services	
Computer Services	\$0
Subawards	\$0
Other	\$30,396
Total Other Direct Costs (G)	\$30,762
H. Total Direct Costs (A Through G)	\$314,752
I. Indirect Costs*	\$51,306
J. Total Direct and Indirect Costs (H + I)	\$366,058
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$366,058
M. Cost Sharing Proposed Level	\$0

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2409713

Managing Division Abbreviation: PHY

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Renewal Amendment Date: 07/08/2024 Amendment Number: 000 Proposal Number: 2409713 Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2409713 Award Instrument: Standard Grant

Award Date: 07/08/2024

Award Period of Performance: Start Date: 09/01/2024 End Date: 08/31/2027

Project Title: Quantum Simulation with a Floquet Engineered Array of Interacting Molecules

Managing Division Abbreviation: PHY **Research and Development Award:** Yes

Funding Opportunity: NSF 23-615 Division of Physics: Investigator-Initiated Research Projects

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

(Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$511,970

Total Intended Award Amount: \$511,970

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$511,970 **Expenditure Limitation:** Not Applicable

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Pamela V. Conyers Email: pconyers@nsf.gov Phone: (703) 292-5329 **Awarding Official**

Name: Pamela V. Conyers Email: pconyers@nsf.gov

Managing Program Officer

Name: Mark Kevin Beck Email: mkbeck@nsf.gov Phone: (703) 292-2983

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-615 Division of Physics: Investigator-Initiated Research Projects.

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	0.60
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$17,798
B. Other Personnel	

Post Doctoral Scholars	
Post Doctoral Count	3.00
Post Doctoral Calendar Months	1.50
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$100,454
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	3.00
Graduate Students Amount	\$67,784
Undergraduate Students	· · · · · · · · · · · · · · · · · · ·
Undergraduate Students Count	0.00
Undergraduate Students	Φ.Ο.
Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
Total Salaries and Wages (A+B)	\$186,036
C. Fringe Benefits	\$25,424
Total Salaries, Wages, Fringe	\$211.460
Benefits $(A + B + C)$	\$211,460
D. Equipment	\$130,132
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00

Total Participant Costs (F)	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$24,470
Total Other Direct Costs (G)	\$24,470
H. Total Direct Costs (A	\$366,062
Through G)	. ,
I. Indirect Costs*	\$145,908
J. Total Direct and Indirect	\$511,970
Costs (H + I)	Ψ211,570
K. Fees	\$0
L. Total Amount of Request (J)	\$511,970
OR (J + K)	φ311,970
M. Cost Sharing Proposed	\$0
Level	ΨΟ

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2412346

Managing Division Abbreviation: DMS Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project Amendment Date: 02/26/2024 Amendment Number: 000 Proposal Number: 2412346 Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

The "Administration of NSF Conference or Group Travel Award Grant Conditions (FL 26)" in effect the date of this amendment are applicable. The FL 26 special award conditions can be found at: https://www.nsf.gov/awards/managing/special conditions.jsp.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

AWARD INFORMATION

Award Number (FAIN): 2412346 Award Instrument: Standard Grant

Award Date: 02/26/2024

Award Period of Performance: Start Date: 05/15/2024 End Date: 04/30/2025 Project Title: Conference: Amplituhedra, Cluster Algebras and Positive Geometry

Managing Division Abbreviation: DMS Research and Development Award: Yes

Funding Opportunity: NSF 21-541 Conferences and Workshops in the Mathematical Sciences Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

(Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$45,000

Total Intended Award Amount: \$45,000

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$45,000 Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact) Name: Lynda Kummelt

Email: lkummelt@nsf.gov

Phone: (703) 292-7721

Awarding Official

Name: Lynda Kummelt

Email: lkummelt@nsf.gov

Managing Program Officer Name: Stefaan Guido De

Winter

Email: sgdewint@nsf.gov **Phone:** (703) 292-2599

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-541 Conferences and Workshops in the Mathematical Sciences.

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar	0.00
Months	0.00
Senior Personnel Academic	0.00
Months	
Senior Personnel Summer	0.00
Months	
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar	0.00
Months	0.00
Other Professionals Academic	0.00
Months	0.00
Other Professionals Summer	0.00
Months	
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students	\$0
Amount	ΨΟ
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	
Other	
Other Count	0.00
Other Amount	\$0
Total Salaries and Wages (A+B)	\$0
C. Fringe Benefits	\$0

Total Salaries, Wages, Fringe	\$0
Benefits $(A + B + C)$	Ψ0
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$45,000
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	30.00
Total Participant Costs (F)	\$45,000
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
Total Other Direct Costs (G)	\$0
H. Total Direct Costs (A Through G)	\$45,000
I. Indirect Costs*	\$0
J. Total Direct and Indirect Costs (H + I)	\$45,000
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$45,000
M. Cost Sharing Proposed Level	\$0

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2412783

Managing Division Abbreviation: PHY

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project Amendment Date: 07/08/2024 Amendment Number: 000 Proposal Number: 2412783 Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the grant and shave

in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2412783 **Award Instrument:** Continuing Grant

Award Date: 07/08/2024

Award Period of Performance: Start Date: 07/15/2024 End Date: 06/30/2027

Project Title: RNA Self-Repair Induced by Sunlight: Can a Novel Mechanism Shed Light on Life's

Origins and RNA Cell Function?

Managing Division Abbreviation: PHY **Research and Development Award:** Yes

Funding Opportunity: NSF 23-615 Division of Physics: Investigator-Initiated Research Projects

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

(Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$171,515

Total Intended Award Amount: \$549,701

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$171,515 **Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2025	\$186,096
2026	\$192,090

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF

HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Pamela V. Conyers Email: pconyers@nsf.gov

Phone: (703) 292-5329

Awarding Official

Name: Pamela V. Conyers

Email: pconyers@nsf.gov

Managing Program Officer

Name: Krastan B Blagoev Email: kblagoev@nsf.gov Phone: (703) 292-4666

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-615 Division of Physics: Investigator-Initiated Research Projects.

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	0.25

Senior Personnel Academic Months	0.00
Senior Personnel Summer	0.00
Months Spring Personnel Amount	\$7.600
Senior Personnel Amount	\$7,699
B. Other Personnel	
Post Doctoral Scholars	1.00
Post Doctoral Count	1.00
Post Doctoral Calendar Months	12.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$67,600
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer	0.00
Months	
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	,
Other Count	0.00
Other Amount	\$0
Total Salaries and Wages (A+B)	\$75,299
C. Fringe Benefits	\$16,189
Total Salaries, Wages, Fringe	,
Benefits $(A + B + C)$	\$91,488
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0

Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
Total Participant Costs (F)	\$0
G. Other Direct Costs	
Materials Supplies	\$10,000
Publication Costs	\$0
Consultant Services	
Computer Services	\$0
Subawards	\$0
Other	\$0
Total Other Direct Costs (G)	\$10,000
H. Total Direct Costs (A Through G)	\$101,488
I. Indirect Costs*	\$70,027
J. Total Direct and Indirect Costs (H + I) \$171	
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$171,515
M. Cost Sharing Proposed Level	\$0

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2422348

Managing Division Abbreviation: EFMA Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project Amendment Date: 08/29/2024 Amendment Number: 000 Proposal Number: 2422348 Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

The Foundation authorizes the awardee to enter into the proposed subaward arrangement. The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in effect at the time of this award amendment, and contain any special conditions included in this award.

AWARD INFORMATION

Award Number (FAIN): 2422348 Award Instrument: Continuing Grant

Award Date: 08/29/2024

Award Period of Performance: Start Date: 09/01/2024 End Date: 08/31/2028

Project Title: EFRI BEGIN OI:Neuron-Soft Organoid-Computer Interfaces for Long-Term Three-

Dimensional Neural Network Computing Managing Division Abbreviation: EFMA Research and Development Award: Yes

Funding Opportunity: NSF 24-508 Emerging Frontiers in Research and Innovation

Assistance Listing Number(s) and Name(s): 47.041 Engineering Grants (Predominant source of

funding for SEFA reporting), 47.049 Mathematical and Physical Sciences

FUNDING INFORMATION

 $\textbf{Amount Obligated by this Amendment: } \$1,775,\!000$

Total Intended Award Amount: \$2,000,000

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$1,775,000 **Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2025	\$225,000

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF

HARVARD COLLEGE

co-Principal Investigator:

Email

Organization: UNIVERSITY OF TEXAS AT AUSTIN

co-Principal Investigator:

Email:

Organization: PRESIDENT

AND FELLOWS OF HARVARD COLLEGE

co-Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)
Name: Tamika Lloyd
Email: tlloyd@nsf.gov

Phone:

Awarding Official

Name: Angela A. Turner Email: aturner@nsf.gov

Managing Program Officer

Name: Alias Smith Email: alismith@nsf.gov Phone: (703) 292-8367

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-508 Emerging Frontiers in Research and Innovation.

A. Senior Personnel		
Senior Personnel Count	12.00	
Senior Personnel Calendar	6.75	
Months	0.75	
Senior Personnel Academic	0.00	
Months	0.00	
Senior Personnel Summer	0.00	
Months		
Senior Personnel Amount	\$133,232	
B. Other Personnel		
Post Doctoral Scholars		
Post Doctoral Count	0.00	
Post Doctoral Calendar	0.00	
Months	0.00	
Post Doctoral Academic	0.00	
Months		
Post Doctoral Summer	0.00	
Months		
Post Doctoral Amount	\$0	
Other Professionals		
Other Professionals Count	3.00	
Other Professionals Calendar	3.60	
Months		
Other Professionals Academic	0.00	
Months		
Other Professionals Summer	0.00	
Months	Ф22.555	
Other Professionals Amount	\$23,775	
Graduate Students		
Graduate Students Count	9.00	
Graduate Students Amount	\$417,534	
Undergraduate Students		
Undergraduate Students Count	0.00	
Undergraduate Students	\$0	
Amount	\$0	
Secretarial - Clerical		
Secretarial - Clerical Count	0.00	
Secretarial - Clerical Amount	\$0	
Other		
Other Count	0.00	

Other Amount	\$0
Total Salaries and Wages	\$574,541
(A+B)	
C. Fringe Benefits	\$38,191
Total Salaries, Wages, Fringe Benefits $(A + B + C)$	\$612,732
D. Equipment	\$0
E. Travel	
Domestic	\$14,200
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
Total Participant Costs (F)	\$0
G. Other Direct Costs	
Materials Supplies	\$87,406
Publication Costs	\$1,183
Consultant Services	\$0
Computer Services	\$0
Subawards	\$367,724
Other	\$160,419
Total Other Direct Costs (G)	\$616,732
H. Total Direct Costs (A Through G)	\$1,243,664
I. Indirect Costs*	\$531,336
J. Total Direct and Indirect Costs (H + I)	\$1,775,000
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$1,775,000
M. Cost Sharing Proposed Level	\$0

Item Name	Indirect Cost Rate
MTDC	69.0000%

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MTDC - Wyss	89.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2425714

Managing Division Abbreviation: RISE Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project Amendment Date: 08/29/2024 **Amendment Number: 000 Proposal Number: 2425714 Amendment Description:**

The National Science Foundation hereby awards a Standard Grant for support of the project described

in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2425714 Award Instrument: Standard Grant

Award Date: 08/29/2024

Award Period of Performance: Start Date: 09/15/2024 End Date: 08/31/2027

Project Title: Collaborative Research: CAIG: A Large Foundational Model for Earthquake

Understanding

Managing Division Abbreviation: RISE Research and Development Award: Yes

Funding Opportunity: NSF 24-518 Collaborations in Artificial Intelligence and Geosciences

Assistance Listing Number(s) and Name(s): 47.050 Geosciences (Predominant source of funding for

SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$452,604

Total Intended Award Amount: \$452,604

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$452,604 **Expenditure Limitation:** Not Applicable

PROJECT PERSONNEL

Principal Investigator:Email:Organization: PRESIDENT ANDFELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2425714	Y		Harvard College, President & Fellows of Harvard University
2425715	N		Trustees of Boston University

NSF CONTACT INFORMATION

Managing Grants

Official (Primary

Contact) Awarding Official Name: Angela A. Name: Willie M. Powell

Turner **Email:**

aturner@nsf.gov

Phone: (703) 292-7524

Managing Program Officer

Name: Andrew Alexander Zaffos

Email: azaffos@nsf.gov Phone: (703) 292-4938

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

Email: wpowell@nsf.gov

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-518 Collaborations in Artificial Intelligence and Geosciences.

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	0.65
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$10,324
B. Other Personnel	· · · · · · · · · · · · · · · · · · ·
Post Doctoral Scholars	
Post Doctoral Count	2.00
Post Doctoral Calendar Months	12.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$67,954
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	4 0
Graduate Students Count	3.00
Graduate Students Amount	\$160,727
Undergraduate Students	*************************************
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
Total Salaries and Wages (A+B)	\$239,005
C. Fringe Benefits	\$16,830
Total Salaries, Wages, Fringe Benefits $(A + B + C)$	\$255,835
D. Equipment	\$0
<i>D.</i> Eզաբուշու	D

E. Travel	
Domestic	\$5,978
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
Total Participant Costs (F)	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$6,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
Total Other Direct Costs (G)	\$6,000
H. Total Direct Costs (A Through G)	\$267,813
I. Indirect Costs*	\$184,791
J. Total Direct and Indirect Costs (H + I)	\$452,604
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$452,604
M. Cost Sharing Proposed Level	\$0

Item Name	Indirect Cost Rate
Department costs	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2426105

Managing Division Abbreviation: MCB Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project Amendment Date: 08/01/2024 Amendment Number: 000 Proposal Number: 2426105 Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/17/2024.

AWARD INFORMATION

Award Number (FAIN): 2426105 **Award Instrument:** Standard Grant

Award Date: 08/01/2024

Award Period of Performance: Start Date: 08/01/2024 End Date: 07/31/2028 **Project Title:** Understanding within-cell plasmid evolution with synthetic systems

Managing Division Abbreviation: MCB **Research and Development Award:** Yes

Funding Opportunity: NSF 24-539 Division of Molecular and Cellular Biosciences Core Programs Assistance Listing Number(s) and Name(s): 47.074 Biological Sciences (Predominant source of

funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$1,100,000

Total Intended Award Amount: \$1,100,000

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$1,100,000 **Expenditure Limitation:** Not Applicable

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Sharon D. Glivens Email: sglivens@nsf.gov Phone: (703) 292-7837

Awarding Official

Name: Vanessa L. Richardson Email: vlrichar@nsf.gov

Managing Program Officer

Name: Bianca Garner Email: bgarner@nsf.gov Phone: (703) 292-7587

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-539 Division of Molecular and Cellular Biosciences Core Programs.

A. Senior Personnel	
Senior Personnel Count	4.00
Senior Personnel Calendar Months	4.80
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$81,170
B. Other Personnel	

Post Doctoral Scholars		
Post Doctoral Count	4.00	
Post Doctoral Calendar	33.60	
Months	33.00	
Post Doctoral Academic	0.00	
Months		
Post Doctoral Summer	0.00	
Months		
Post Doctoral Amount	\$222,569	
Other Professionals		
Other Professionals Count	0.00	
Other Professionals Calendar	0.00	
Months		
Other Professionals Academic	0.00	
Months	000000 000	
Other Professionals Summer	0.00	
Months	Ф.О.	
Other Professionals Amount	\$0	
Graduate Students		
Graduate Students Count	4.00	
Graduate Students Amount	\$133,238	
Undergraduate Students		
Undergraduate Students Count	0.00	
Undergraduate Students	\$0	
Amount	ΨΟ	
Secretarial - Clerical		
Secretarial - Clerical Count	0.00	
Secretarial - Clerical Amount	\$0	
Other		
Other Count	0.00	
Other Amount	\$0	
Total Salaries and Wages	\$436,977	
(A+B)	\$430,977	
C. Fringe Benefits	\$67,126	
Total Salaries, Wages, Fringe	\$504,103	
Benefits $(A + B + C)$	\$504,105	
D. Equipment	\$0	
E. Travel		
Domestic	\$6,000	
International	\$0	
F. Participant Support Costs		
Participant Support Costs	ው ላ	
Stipends	\$0	
Participant Support Costs	Φ Λ	
Travel	\$0	
Participant Support Costs	\$0	
Subsistence	φU	

Participant Support Costs Other	\$0
Total Number of Participants	0.00
Total Participant Costs (F)	\$0
G. Other Direct Costs	
Materials Supplies	\$113,768
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$42,540
Total Other Direct Costs (G)	\$156,308
H. Total Direct Costs (A Through G)	\$666,411
I. Indirect Costs*	\$433,589
J. Total Direct and Indirect Costs (H + I)	\$1,100,000
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$1,100,000
M. Cost Sharing Proposed Level	\$0

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2426145

Managing Division
Abbreviation: AGS
Amendment Number: 001

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Other Admin No Fund Actions

Amendment Date: 12/20/2024 Amendment Number: 001

Proposal Number: Not Applicable

Amendment Description:

The purpose of this amendment is to change the PI or co-PI in accordance with the Change PI and Add/Change Co-PI request submitted on 12/19/2024. Effective with this amendment, the project is now under the direction of

Except as modified by this amendment, the award conditions remain unchanged.

PROJECT PERSONNEL

Principal Investigator: Email:

Organization:PRESIDENT AND
FELLOWS OF HARVARD

COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)
Name: Staci Jenkins
Email: sjenkins@nsf.gov

Phone: (703) 292-5042

Awarding Official

Name: Vanessa L. Richardson Email: vlrichar@nsf.gov

Managing Program

Officer

Name: Sylvia Edgerton Email: sedgerto@nsf.gov Phone: (703) 292-8522

Award Notice

Award Number (FAIN): 2426145

Managing Division Abbreviation: AGS

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project Amendment Date: 04/23/2024 Amendment Number: 000 Proposal Number: 2426145 Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2426145 Award Instrument: Standard Grant

Award Date: 04/23/2024

Award Period of Performance: Start Date: 06/01/2024 End Date: 05/31/2025

Project Title: RAPID: Ongoing Impacts of the Extraordinary Hunga Tonga Volcanic Eruption on the

Stratosphere

Managing Division Abbreviation: AGS **Research and Development Award:** Yes

Funding Opportunity: PD 23-1524 Atmospheric Chemistry

Assistance Listing Number(s) and Name(s): 47.050 Geosciences (Predominant source of funding for

SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$199,479

Total Intended Award Amount: \$199,479

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$199,479 **Expenditure Limitation:** Not Applicable

PROJECT PERSONNEL

Principal Investigator:

Email

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)
Name: Staci Jenkins
Email: sjenkins@nsf.gov
Phone: (703) 292-5042

Awarding Official Name: Staci Jenkins Email: sjenkins@nsf.gov Managing Program Officer Name: Sylvia Edgerton Email: sedgerto@nsf.gov Phone: (703) 292-8522

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

A. Senior Personnel	
Senior Personnel Count	2.00
Senior Personnel Calendar Months	4.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$43,426
B. Other Personnel	
Post Doctoral Scholars	

Post Doctoral Count	0.00	
Post Doctoral Calendar Months	0.00	
Post Doctoral Academic Months	0.00	
Post Doctoral Summer Months	0.00	
Post Doctoral Amount	\$0	
Other Professionals		
Other Professionals Count	1.00	
Other Professionals Calendar Months	1.75	
Other Professionals Academic		
Months	0.00	
Other Professionals Summer Months	0.00	
Other Professionals Amount	\$16,483	
Graduate Students	φ10, 4 03	
Graduate Students Count	1.00	
Graduate Students Count Graduate Students Amount		
	\$24,744	
Undergraduate Students	0.00	
Undergraduate Students Count	0.00	
Undergraduate Students Amount	\$0	
Secretarial - Clerical		
Secretarial - Clerical Count	0.00	
Secretarial - Clerical Amount	\$0	
Other		
Other Count	0.00	
Other Amount	\$0	
Total Salaries and Wages (A+B)	\$84,653	
C. Fringe Benefits	\$21,479	
Total Salaries, Wages, Fringe	·	
Benefits $(A + B + C)$	\$106,132	
D. Equipment	\$0	
E. Travel		
Domestic	\$2,952	
International	\$0	
F. Participant Support Costs		
Participant Support Costs Stipends	\$0	
Participant Support Costs Travel	\$0	
Participant Support Costs	\$0	
Subsistence Participant Support Costs Other	\$0	
Total Number of Participants	0.00	
Total Participant Costs (F)	\$0	
2000 1 an elepante Costs (1)	Ψ5	

G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$3,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$10,057
Total Other Direct Costs (G)	\$13,057
H. Total Direct Costs (A Through G)	\$122,141
I. Indirect Costs*	\$77,338
J. Total Direct and Indirect Costs (H + I)	\$199,479
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$199,479
M. Cost Sharing Proposed Level	\$0

Item Name	Indirect Cost Rate
IDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2426448

Managing Division
Abbreviation: EAR
Amendment Number: 002

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Other Admin No Fund Actions

Amendment Date: 10/04/2024 Amendment Number: 002

Proposal Number: Not Applicable

Amendment Description:

The purpose of this amendment is to approve the Pre-award Costs in Excess of 90 Days in accordance with the request submitted on 10/02/2024. Reimbursement of pre-award costs is authorized, up to \$2,190 and not earlier than July 1, 2023.

Except as modified by this amendment, the award conditions remain unchanged.

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Angela A. Turner Email: aturner@nsf.gov

Phone: (703) 292-7524

Awarding Official Name: Willie M. Powell

Email: wpowell@nsf.gov

Managing Program

Officer

Name: Yurena Yanes Email: yyanes@nsf.gov Phone: (703) 292-2649

Award Notice

Award Number (FAIN): 2426448

Managing Division Abbreviation: EAR Amendment Number: 000

ORIGINAL AWARD INFORMATION

Recipient (Legal Business Name): THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY

OF NEW YORK

Recipient Address: 615 W 131ST ST MC 8741 NEW YORK, NY 10027-7922

Official Recipient Email Address:

Unique Entity Identifier (UEI): F4N1QNPB95M4

Award Number (FAIN): 1945446

Award Period of Performance: Start Date: 07/01/2020 End Date: 06/30/2025

Revised End Date: 05/31/2024

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: PI Transfer Amendment Date: 05/02/2024 Amendment Number: 000 Proposal Number: 2426448 Amendment Description:

The award transfer referenced in this notice has been approved by NSF. Acceptance of this transfer award constitutes the recipient organization's agreement to assume responsibility for completion of the project effort and to administer the award from the agreed upon transfer date, noted on the NSF Grant Transfer Request, to completion of the project in accordance with any award-specific terms and conditions and the general terms and conditions contained in this notice.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies

and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

AWARD INFORMATION

Award Number (FAIN): 2426448 **Award Instrument:** Continuing Grant

Award Date: 05/02/2024

Award Period of Performance: Start Date: 10/01/2023 End Date: 08/31/2025

Project Title: CAREER: Developing novel biomarker proxies to constrain Neogene changes in African

woody cover and paleoecological contexts of hominin evolution

Managing Division Abbreviation: EAR **Research and Development Award:** Yes

Funding Opportunity: NSF 17-537 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.050 Geosciences (Predominant source of funding for

SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$398,195

Total Intended Award Amount: \$699,527

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$398,195

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Angela A. Turner Email: aturner@nsf.gov

Phone: (703) 292-7524

Awarding Official

Name: Angela A. Turner Email: aturner@nsf.gov

Managing Program Officer

Name: Yurena Yanes Email: yyanes@nsf.gov Phone: (703) 292-2649

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 17-537 Faculty Early Career Development Program.

A. Senior Personnel		
Senior Personnel Count	1.00	
Senior Personnel Calendar Months	2.00	
Senior Personnel Academic Months	0.00	
Senior Personnel Summer Months	0.00	
Senior Personnel Amount	\$60,913	
B. Other Personnel		
Post Doctoral Scholars		
Post Doctoral Count	0.00	
Post Doctoral Calendar Months	0.00	
Post Doctoral Academic Months	0.00	
Post Doctoral Summer Months	0.00	
Post Doctoral Amount	\$0	
Other Professionals		
Other Professionals Count	0.00	
Other Professionals Calendar Months	0.00	
Other Professionals Academic Months	0.00	
Other Professionals Summer Months	0.00	
Other Professionals Amount	\$0	
Graduate Students		
Graduate Students Count	1.00	
Graduate Students Amount	\$49,000	
Undergraduate Students		

Undergraduate Students Count	1.00	
Undergraduate Students	\$3,451	
Amount	Ψ3,131	
Secretarial - Clerical		
Secretarial - Clerical Count	1.00	
Secretarial - Clerical Amount	\$0	
Other		
Other Count	0.00	
Other Amount	\$0	
Total Salaries and Wages (A+B)	\$113,364	
C. Fringe Benefits	\$13,096	
Total Salaries, Wages, Fringe	\$126.460	
Benefits $(A + B + C)$	\$126,460	
D. Equipment	\$0	
E. Travel		
Domestic	\$7,550	
International	\$17,106	
F. Participant Support Costs		
Participant Support Costs	Φ.Δ.	
Stipends	\$0	
Participant Support Costs	\$0	
Travel	\$0	
Participant Support Costs	\$0	
Subsistence	"	
Participant Support Costs Other	\$0	
Total Number of Participants	12.00	
Total Participant Costs (F)	\$60,000	
G. Other Direct Costs		
Materials Supplies	\$6,000	
Publication Costs	\$3,000	
Consultant Services	\$0	
Computer Services	\$40,000	
Subawards	\$0	
Other	\$0	
Total Other Direct Costs (G)	\$49,000	
H. Total Direct Costs (A	00.00.11.0	
Through G)	\$260,116	
I. Indirect Costs*	\$138,079	
J. Total Direct and Indirect Costs (H + I)	\$398,195	
K. Fees	\$0	
L. Total Amount of Request (J) OR (J + K)	\$398,195	
M. Cost Sharing Proposed Level	\$0	

Total Amount of Request

The **Total Amount of Request** (Budget Line L) may differ from the **Amount Obligated by this Amendment** (Funding Information section) due to rounding. The **Amount Obligated by this Amendment** is the amount obligated in the NSF financial system for this award.

*Indirect Cost Rates

Item Name	Indirect Cost Rate
138079	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2427124 Managing Division Abbreviation: IIS

Amendment Number: 000

ORIGINAL AWARD INFORMATION

Recipient (Legal Business Name): ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI

Recipient Address: 1 GUSTAVE L LEVY PL NEW YORK, NY 10029-6504

Official Recipient Email Address:

Unique Entity Identifier (UEI): C8H9CNG1VBD9

Award Number (FAIN): 2046583

Award Period of Performance: Start Date: 09/01/2021 End Date: 08/31/2026

Revised End Date: 06/30/2024

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: PI Transfer Amendment Date: 05/08/2024 Amendment Number: 000 Proposal Number: 2427124 Amendment Description:

The award transfer referenced in this notice has been approved by NSF. Acceptance of this transfer award constitutes the recipient organization's agreement to assume responsibility for completion of the project effort and to administer the award from the agreed upon transfer date, noted on the NSF Grant Transfer Request, to completion of the project in accordance with any award-specific terms and conditions and the general terms and conditions contained in this notice.

AWARD INFORMATION

Award Number (FAIN): 2427124 Award Instrument: Continuing Grant Award Date: 05/08/2024

Award Period of Performance: Start Date: 10/01/2023 End Date: 08/31/2026

Project Title: CAREER: Untangling Inter-Area Communication in the Brain Using Multi-Region

Neural Networks

Managing Division Abbreviation: IIS Research and Development Award: Yes

Funding Opportunity: NSF 20-525 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.070 Computer and Information Science and

Engineering (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$351,588

Total Intended Award Amount: \$549,323

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$351,588

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: ICAHN SCHOOL OF MEDICINE AT

MOUNT SINAI

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Tianay M. Robinson Email: trobinso@nsf.gov

Phone: (703) 292-7859

Awarding Official

Name: Jannele L. Gosey Email: jgosey@nsf.gov

Managing Program Officer

Name: Kenneth C. Whang Email: kwhang@nsf.gov Phone: (703) 292-5149

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 20-525 Faculty Early Career Development Program.

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar	1.20
Months	1.20
Senior Personnel Academic	0.00
Months	0.00
Senior Personnel Summer	0.00
Months	ф .57. 000
Senior Personnel Amount	\$57,000
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	1.00
Post Doctoral Calendar Months	4.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$94,341
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar	0.00
Months	0.00
Other Professionals Academic	0.00
Months	0.00
Other Professionals Summer	0.00
Months	
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students	\$0
Amount	•
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
Total Salaries and Wages (A+B)	\$151,341
C. Fringe Benefits	\$32,085
Total Salaries, Wages, Fringe	\$183,426
Benefits $(A + B + C)$	Φ105,420
D. Equipment	\$0

E. Travel	
Domestic	\$4,500
International	\$3,000
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
Total Participant Costs (F)	\$0
G. Other Direct Costs	
Materials Supplies	\$6,000
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$10,500
Total Other Direct Costs (G)	\$16,500
H. Total Direct Costs (A Through G)	\$207,426
I. Indirect Costs*	\$144,162
J. Total Direct and Indirect Costs (H + I)	\$351,588
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$351,588
M. Cost Sharing Proposed Level	\$0

Total Amount of Request

The **Total Amount of Request** (Budget Line L) may differ from the **Amount Obligated by this Amendment** (Funding Information section) due to rounding. The **Amount Obligated by this Amendment** is the amount obligated in the NSF financial system for this award.

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal

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& Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2427291

Managing Division
Abbreviation: OPP
Amendment Number: 001

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Other Admin No Fund Actions

Amendment Date: 12/08/2024 Amendment Number: 001

Proposal Number: Not Applicable

Amendment Description:

The purpose of this amendment is to authorize the awardee to enter into the proposed subaward agreement in accordance with the Subawarding, Transferring or Contracting Out Part of an NSF Award request submitted on 10/30/2024.

The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in effect at the time of this award amendment, and contain any special conditions included in this award.

Except as modified by this amendment, the award conditions remain unchanged.

PROJECT PERSONNEL

Principal Investigator: Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official (Primary Contact)

Name: Angela A. Turner Email: aturner@nsf.gov Awarding Official Name: Angela A. Turner Email: aturner@nsf.gov Managing Program Officer Name: Roberto Delgado Email: robdelga@nsf.gov Case 1:25-cv-11048-ADB Document 224-22 Filed 07/14/25 Page 44 of 64

Phone: (703) 292-7524 **Phone:** (703) 292-2397

Award Notice

Award Number (FAIN): 2427291

Managing Division Abbreviation: OPP Amendment Number: 000

ORIGINAL AWARD INFORMATION

Recipient (Legal Business Name): AURORA FLIGHT SCIENCES CORPORATION

Recipient Address: 9950 WAKEMAN DR MANASSAS VA 20110-2702

Official Recipient Email Address:

Unique Entity Identifier (UEI): K1L1BZLNPWC4

Award Number (FAIN): 1855928

Award Period of Performance: Start Date: 01/01/2021 End Date: 12/31/2024

Revised End Date: 05/31/2024

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: PI Transfer Amendment Date: 04/16/2024 Amendment Number: 000 Proposal Number: 2427291 Amendment Description:

The award transfer referenced in this notice has been approved by NSF. Acceptance of this transfer award constitutes the recipient organization's agreement to assume responsibility for completion of the project effort and to administer the award from the agreed upon transfer date, noted on the NSF Grant Transfer Request, to completion of the project in accordance with any award-specific terms and conditions and the general terms and conditions contained in this notice.

Please read the components carefully as they outline specific requirements for receiving this funding.

1. Principal investigators and their teams are required to comply with the OPP Data Management Policy (NSF 22-106) (https://www.nsf.gov/pubs/2022/nsf22106/nsf22106.jsp) and evidence of compliance is required in annual and final project reports. In all project reports submitted to NSF, principal investigators must address the status of storing metadata files, physical/biological/archaeological samples, full data sets, and derived data products into long-lived and publicly accessible archive(s).

- 2. Participants in research supported by NSF are expected to follow the 2018 Principles for Conducting Research in the Arctic (https://www.nsf.gov/geo/opp/arctic/conduct.jsp) adopted by the U.S. Interagency Arctic Research Policy Committee (IARPC). Investigators may find useful these resources from NSF and resources (https://www.nsf.gov/geo/opp/arctic/ace/) from ARCUS (https://www.arcus.org/resources/northern-communities).
- 3. Principal Investigators are expected to specifically address progress on activities related to proposed Broader Impacts and any postdoctoral mentoring in annual and final reports.
- 4. As part of the Office of Polar Programs efforts to increase diversity and inclusion in the Antarctic, please seek to recruit qualified students and others working on your project from historically underrepresented groups in STEM, e.g., women, minorities, persons with disabilities, LGBTQ+ students and veterans. Diversifying and broadening participation is a priority for the Arctic Sciences Section.

AWARD INFORMATION

Award Number (FAIN): 2427291 Award Instrument: Continuing Grant

Award Date: 04/16/2024

Award Period of Performance: Start Date: 03/15/2024 End Date: 12/31/2024

Project Title: Collaborative Research: Bridging the scale gap between local and regional methane and

carbon dioxide isotopic fluxes in the Arctic Managing Division Abbreviation: OPP Research and Development Award: Yes

Funding Opportunity: NSF 16-595 Arctic Research Opportunities

Assistance Listing Number(s) and Name(s): 47.078 Polar Programs (Predominant source of funding

for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$805,625

Total Intended Award Amount: \$805,625

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$805,625

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official (Primary Contact)

Awarding Official Name: Angela A. Turner Managing Program Officer Name: Roberto Delgado

Name: Angela A. Turner Email: aturner@nsf.gov Email: robdelga@nsf.gov Phone: (703) 292-2397

Phone: (703) 292-7524

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 16-595 Arctic Research Opportunities.

A. Senior Personnel		
Senior Personnel Count	1.00	
Senior Personnel Calendar Months	10.00	
Senior Personnel Academic Months	0.00	
Senior Personnel Summer Months	0.00	
Senior Personnel Amount	\$105,729	
B. Other Personnel		
Post Doctoral Scholars		
Post Doctoral Count	0.00	
Post Doctoral Calendar Months	0.00	
Post Doctoral Academic Months	0.00	
Post Doctoral Summer Months	0.00	
Post Doctoral Amount	\$0	
Other Professionals		
Other Professionals Count	0.00	
Other Professionals Calendar Months	0.00	
Other Professionals Academic Months	0.00	
Other Professionals Summer Months	0.00	
Other Professionals Amount	\$0	

Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	• • •
Other Count	2.00
Other Amount	\$153,202
Total Salaries and Wages (A+B)	\$258,931
C. Fringe Benefits	\$86,004
Total Salaries, Wages, Fringe Benefits (A + B + C)	\$344,935
D. Equipment	\$121,573
E. Travel	\$121,075
Domestic	\$41,830
International	\$0
F. Participant Support Costs	Ψ0
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
Total Participant Costs (F)	\$0
G. Other Direct Costs	· · · · · · · · · · · · · · · · · · ·
Materials Supplies	\$0
Publication Costs	\$10,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$8,000
Total Other Direct Costs (G)	\$18,000
H. Total Direct Costs (A)	,
Through G)	\$526,338
I. Indirect Costs*	\$279,287
J. Total Direct and Indirect Costs (H + I)	\$805,625
K. Fees	\$0
L. Total Amount of Request (J)	\$805,625

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OR (J + K)	
M. Cost Sharing Proposed Level	\$0
Level	

Total Amount of Request

The **Total Amount of Request** (Budget Line L) may differ from the **Amount Obligated by this Amendment** (Funding Information section) due to rounding. The **Amount Obligated by this Amendment** is the amount obligated in the NSF financial system for this award.

*Indirect Cost Rates

Item Name	Indirect Cost Rate
279288	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2427533 **Managing Division Abbreviation:** ITE

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project Amendment Date: 09/18/2024 Amendment Number: 000 Proposal Number: 2427533 Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, subtask, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

AWARD INFORMATION

Award Number (FAIN): 2427533 Award Instrument: Standard Grant

Award Date: 09/18/2024

Award Period of Performance: Start Date: 10/01/2024 End Date: 03/31/2026

Project Title: ReDDDoT Phase 1: Planning Grant: Piloting an impact accelerator model for cultivating

equity and ethics in genetics innovation **Managing Division Abbreviation: ITE** Research and Development Award: Yes

Funding Opportunity: NSF 24-524 Responsible Design, Development, and Deployment of

Technologies

Assistance Listing Number(s) and Name(s): 47.074 Biological Sciences (Predominant source of

funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$299,993

Total Intended Award Amount: \$299.993

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$299,993 Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact) Name: Malia Williams Email: malwilli@nsf.gov

Phone: (703) 292-2290

Awarding Official

Name: Malia Williams

Email: malwilli@nsf.gov

Managing Program

Officer

Name: Danielle Frances

Sumy

Email: dsumy@nsf.gov **Phone:** (703) 292-4217

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-524 Responsible Design, Development, and Deployment of Technologies.

A. Senior Personnel	
Senior Personnel Count	2.00
Senior Personnel Calendar	4.50
Months	4.50
Senior Personnel Academic	0.00
Months	0.00
Senior Personnel Summer	0.00
Months	
Senior Personnel Amount	\$37,508
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic	0.00
Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	2.00
Other Professionals Calendar	3.33
Months	3.33
Other Professionals Academic	0.00
Months	0.00
Other Professionals Summer	0.00
Months	
Other Professionals Amount	\$25,810
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students	\$0
Amount	\$ 0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
Total Salaries and Wages (A+B)	\$63,318
3 ()	, , , , , , , , , , , , , , , , , , , ,

C. Fringe Benefits	\$13,424
Total Salaries, Wages, Fringe	·
Benefits $(A + B + C)$	\$76,742
D. Equipment	\$0
E. Travel	
Domestic	\$5,360
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$8,250
Participant Support Costs Travel	\$550
Participant Support Costs Subsistence	\$1,350
Participant Support Costs Other	\$2,000
Total Number of Participants	52.00
Total Participant Costs (F)	\$12,150
G. Other Direct Costs	
Materials Supplies	\$1,000
Publication Costs	\$0
Consultant Services	\$122,500
Computer Services	\$0
Subawards	\$0
Other	\$0
Total Other Direct Costs (G)	\$123,500
H. Total Direct Costs (A Through G)	\$217,752
I. Indirect Costs*	\$82,241
J. Total Direct and Indirect Costs (H + I)	\$299,993
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$299,993
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2430375

Managing Division Abbreviation: CCF Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project Amendment Date: 01/03/2025 Amendment Number: 000 Proposal Number: 2430375 Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2430375 Award Instrument: Standard Grant

Award Date: 01/03/2025

Award Period of Performance: Start Date: 01/15/2025 End Date: 12/31/2027

Project Title: FET: Small: A complexity theoretic lens on near- and medium-term quantum devices

Managing Division Abbreviation: CCF **Research and Development Award:** Yes

Funding Opportunity: NSF 23-561 Computer and Information Science and Engineering (CISE): Core

Programs

Assistance Listing Number(s) and Name(s): 47.070 Computer and Information Science and

Engineering (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$600,000

Total Intended Award Amount: \$600,000

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$600,000 Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

co-Principal Investigator:

Email:

Organization: PRESIDENT

AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)
Name: Cartia BrownMorgan

Email: cbrownmo@nsf.gov Phone: (703) 292-8709 **Awarding Official**

Name: Cartia Brown-Morgan Email: cbrownmo@nsf.gov

Managing Program Officer Name: Elizabeth Behrman Email: ebehrman@nsf.gov Phone: (703) 292-7049

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-561 Computer and Information Science and Engineering (CISE): Core Programs.

A. Senior Personnel	
Senior Personnel Count	6.00
Senior Personnel Calendar Months	6.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00

Senior Personnel Amount	\$102,880
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	1.00
Post Doctoral Calendar Months	12.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$70,496
Other Professionals	, , , , , , , , , , , , , , , , , , ,
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	2.00
Graduate Students Amount	\$105,329
Undergraduate Students	+
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	ΨΟ
Other Count	0.00
Other Amount	\$0
Total Salaries and Wages (A+B)	\$278,705
C. Fringe Benefits	\$37,276
Total Salaries, Wages, Fringe	\$315,981
Benefits $(A + B + C)$	
D. Equipment	\$0
E. Travel	
Domestic	\$8,000
International	\$5,000
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0

Total Number of Participants	0.00
Total Participant Costs (F)	\$0
G. Other Direct Costs	
Materials Supplies	\$2,694
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$39,469
Total Other Direct Costs (G)	\$42,163
H. Total Direct Costs (A Through G)	\$371,144
I. Indirect Costs*	\$228,856
J. Total Direct and Indirect Costs (H + I)	\$600,000
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$600,000
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2432024

Managing Division Abbreviation: DMS Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project Amendment Date: 07/26/2024 Amendment Number: 000 Proposal Number: 2432024 Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

The "Administration of NSF Conference or Group Travel Award Grant Conditions (FL 26)" in effect the date of this amendment are applicable. The FL 26 special award conditions can be found at: https://www.nsf.gov/awards/managing/special conditions.jsp.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

AWARD INFORMATION

Award Number (FAIN): 2432024 Award Instrument: Standard Grant

Award Date: 07/26/2024

Award Period of Performance: Start Date: 08/01/2024 End Date: 07/31/2025

Project Title: Conference: Advances in probability theory and interacting particle systems

Managing Division Abbreviation: DMS **Research and Development Award:** Yes

Funding Opportunity: NSF 21-541 Conferences and Workshops in the Mathematical Sciences Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

(Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$37,500

Total Intended Award Amount: \$37,500

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$37,500 **Expenditure Limitation:** Not Applicable

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT

AND FELLOWS OF HARVARD COLLEGE

co-Principal Investigator:

Email:

Organization: NEW YORK

UNIVERSITY

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)
Name: Lynda Kummelt
Email: lkummelt@nsf.gov

Phone: (703) 292-7721

Awarding Official

Name: Lynda Kummelt Email: lkummelt@nsf.gov

Managing Program Officer

Name: Tomek Bartoszynski Email: tbartosz@nsf.gov Phone: (703) 292-4885

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-541 Conferences and Workshops in the Mathematical Sciences.

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	

Other Count	0.00	
Other Amount	\$0	
Total Salaries and Wages (A+B)	\$0	
C. Fringe Benefits	\$0	
Total Salaries, Wages, Fringe	\$0	
Benefits $(A + B + C)$	\$0	
D. Equipment	\$0	
E. Travel		
Domestic	\$0	
International	\$0	
F. Participant Support Costs		
Participant Support Costs	\$0	
Stipends	\$0	
Participant Support Costs Travel	\$37,500	
Participant Support Costs Subsistence	\$0	
Participant Support Costs Other	\$0	
Total Number of Participants	30.00	
Total Participant Costs (F)	\$37,500	
G. Other Direct Costs		
Materials Supplies	\$0	
Publication Costs	\$0	
Consultant Services	\$0	
Computer Services	\$0	
Subawards	\$0	
Other	\$0	
Total Other Direct Costs (G)	\$0	
H. Total Direct Costs (A	\$27.500	
Through G)	\$37,500	
I. Indirect Costs*	\$0	
J. Total Direct and Indirect Costs (H + I)	\$37,500	
K. Fees	\$0	
L. Total Amount of Request (J) OR (J + K)	\$37,500	
M. Cost Sharing Proposed Level	\$0	

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

Award Notice

Award Number (FAIN): 2434664

Managing Division Abbreviation: DMS Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address:

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project Amendment Date: 08/20/2024 Amendment Number: 000 Proposal Number: 2434664 Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2434664 Award Instrument: Standard Grant

Award Date: 08/20/2024

Award Period of Performance: Start Date: 09/15/2024 End Date: 08/31/2027

Project Title: Collaborative Research: AIMING: AI Tools to Knowledge Discovery and Rigorous

Reasoning in Polyhedral Geometry

Managing Division Abbreviation: DMS

Research and Development Award: Yes

Funding Opportunity: NSF 24-554 Artificial Intelligence, Formal Methods, and Mathematical

Reasoning

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

(Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$497,523

Total Intended Award Amount: \$497,523

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$497,523 **Expenditure Limitation:** Not Applicable

PROJECT PERSONNEL

Principal Investigator: Email: Organization: PRESIDENT AND FELLOWS OF HARVARD

COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2434664	Y		Harvard College, President & Fellows of Harvard University
2434665	N		University of California, Davis
2434666	N		Duke University

NSF CONTACT INFORMATION

Managing Grants

Official (Primary

Contact)

Name: Lynda Kummelt

Email:

lkummelt@nsf.gov **Phone:** (703) 292-7721 Awarding Official Name: Lynda Kummelt Email: lkummelt@nsf.gov **Managing Program Officer**

Name: Jun Zhu Email: jzhu@nsf.gov Phone: (703) 292-4551

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at https://www.nsf.gov/awards/managing/rtc.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 24-554 Artificial Intelligence, Formal Methods, and Mathematical Reasoning.

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar	3.60
Months	3.00
Senior Personnel Academic	0.00
Months	0.00
Senior Personnel Summer	0.00
Months	
Senior Personnel Amount	\$54,775
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	2.00
Post Doctoral Calendar Months	24.00
Post Doctoral Academic	0.00
Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$172,104
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar	0.00
Months	0.00
Other Professionals Academic	0.00
Months	0.00
Other Professionals Summer	0.00
Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students	\$0
Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
Total Salaries and Wages (A+B)	\$226,879
	4220, 079